

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

09807452 - 043.103

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 : C12N 15/12, C07K 14/47, C12Q 1/68, A61K 38/17, C07K 16/18		A3	(11) International Publication Number: WO 00/23589																												
			(43) International Publication Date: 27 April 2000 (27.04.00)																												
<p>(21) International Application Number: PCT/US99/24511</p> <p>(22) International Filing Date: 19 October 1999 (19.10.99)</p> <p>(30) Priority Data:</p> <table> <tr><td>60/172,216</td><td>20 October 1998 (20.10.98)</td><td>US</td></tr> <tr><td>60/118,559</td><td>4 February 1999 (04.02.99)</td><td>US</td></tr> <tr><td>60/172,229</td><td>11 February 1999 (11.02.99)</td><td>US</td></tr> <tr><td>60/154,336</td><td>22 April 1999 (22.04.99)</td><td>US</td></tr> </table> <p>(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Applications</p> <table> <tr><td>US</td><td>60/172,216 (CIP)</td></tr> <tr><td>Filed on</td><td>20 October 1998 (20.10.98)</td></tr> <tr><td>US</td><td>60/118,559 (CIP)</td></tr> <tr><td>Filed on</td><td>4 February 1999 (04.02.99)</td></tr> <tr><td>US</td><td>60/172,229 (CIP)</td></tr> <tr><td>Filed on</td><td>11 February 1999 (11.02.99)</td></tr> <tr><td>US</td><td>60/154,336 (CIP)</td></tr> <tr><td>Filed on</td><td>22 April 1999 (22.04.99)</td></tr> </table> <p>(71) Applicant (for all designated States except US): INCYTE PHARMACEUTICALS, INC. [US/US]; 3174 Porter Drive, Palo Alto, CA 94304 (US).</p> <p>(72) Inventors; and</p> <p>(75) Inventors/Applicants (for US only): TANG, Y., Tom [CN/US]; 4230 Ranwick Court, San Jose, CA 95118 (US). YUE, Henry [US/US]; 826 Lois Avenue, Sunnyvale, CA 94087 (US). HILLMAN, Jennifer, L. [US/US]; 230 Monroe Drive, #12, Mountain View, CA 94040 (US). GUEGLER, Karl, J. [CH/US]; 1048 Oakland Avenue, Menlo Park, CA 94025 (US). CORLEY, Neil, C. [US/US]; 1240 Dale Avenue, #30, Mountain View, CA 94040 (US). LAL, Preeti [IN/US]; 2382 Lass Drive, Santa Clara, CA 95054 (US). AZIMZAI, Yalda [US/US]; 2045 Rock Springs Drive, Hayward, CA 94545 (US). BAUGHN, Mariah, R. [US/US]; 14244 Santiago Road, San Leandro, CA 94577 (US). YANG, Junming [CN/US]; 7136 Clarendon Street, San Jose, CA 95129 (US). SHIH, Leo, L. [US/US]; Apartment B, 1081 Tanland Drive, Palo Alto, CA 94304 (US).</p> <p>(74) Agents: BILLINGS, Lucy, J. et al.; Incyte Pharmaceuticals, Inc., 3174 Porter Drive, Palo Alto, CA 94304 (US).</p> <p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published With international search report.</p> <p>(88) Date of publication of the international search report: 28 September 2000 (28.09.00)</p>				60/172,216	20 October 1998 (20.10.98)	US	60/118,559	4 February 1999 (04.02.99)	US	60/172,229	11 February 1999 (11.02.99)	US	60/154,336	22 April 1999 (22.04.99)	US	US	60/172,216 (CIP)	Filed on	20 October 1998 (20.10.98)	US	60/118,559 (CIP)	Filed on	4 February 1999 (04.02.99)	US	60/172,229 (CIP)	Filed on	11 February 1999 (11.02.99)	US	60/154,336 (CIP)	Filed on	22 April 1999 (22.04.99)
60/172,216	20 October 1998 (20.10.98)	US																													
60/118,559	4 February 1999 (04.02.99)	US																													
60/172,229	11 February 1999 (11.02.99)	US																													
60/154,336	22 April 1999 (22.04.99)	US																													
US	60/172,216 (CIP)																														
Filed on	20 October 1998 (20.10.98)																														
US	60/118,559 (CIP)																														
Filed on	4 February 1999 (04.02.99)																														
US	60/172,229 (CIP)																														
Filed on	11 February 1999 (11.02.99)																														
US	60/154,336 (CIP)																														
Filed on	22 April 1999 (22.04.99)																														

(54) Title: PROLIFERATION AND APOPTOSIS RELATED PROTEINS

1 **M S R T M A R T R P G O L G** - - **R V T G A G G G W G S A A V C** 1342011
1 **M A T P V P P P S P R H L R L L R L L S G** - - - - L I GI452276

29 **R G R A L R G R E P A L P S A S F F P D V A A C P G S L D C A** 1342011
25 **L G A A L N G** - - - A T A R R P D A T T C P G S L D C A GI452276

59 **L K R R A R C P P G A H A C G P C L Q P F Q E D Q Q G L C V** 1342011
50 **L K R R A K C P P G A H A C G P C L Q S F Q E D Q R G F C V** GI452276

89 **P R M R R P P G G G R P Q P R L E D E I D F L A Q E L A** - - 1342011
80 **P R K H L S S G E G L P O P R L E E I D S L A Q E L A L K** GI452276

117 **R K E S G H S** - - - **T P P L P K D R Q R L P E P A** - T L G F 1342011
110 **E K E A G H S R L T A Q P L L E R A Q K L L E P A A T L G F** GI452276

143 **S A R G O G L E L G L P S T P G T P T P T P H T S L G S P V** 1342011
140 **S Q W G O R L E F G L P S T H G T S S P I P H T S L S S R A** GI452276

173 **S S D P V H M S P L E P R G G O G D G L A L V L I L A F C V** 1342011
170 **S S G P V Q M S P L E P Q G R H G N G L T L V L I L A F C L** GI452276

(57) Abstract

The invention provides human proliferation and apoptosis related proteins (PROAP) and polynucleotides which identify and encode PROAP. The invention also provides expression vectors, host cells, antibodies, agonists, and antagonists. The invention also provides methods for diagnosing, treating, or preventing disorders associated with expression of PROAP.